Sabouraud Agar Glucose 4%

M1744

Intended Use

Recommended for cultivation of yeasts, moulds and aciduric microorganisms

Composition**

Ingredients	g / L
Casitose #	5.000
HM peptone ##	5.000
D-Glucose	40.000
Agar	15.000
Final pH (at 25°C)	5.6±0.2

**Formula adjusted, standardized to suit performance parameters

Equivalent to Peptone from Casein ## Equivalent to Peptone from Meat

Directions

Suspend 65 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Sabouraud Agar Glucose 4% is a modification of Sabouraud Dextrose Agar which is described by Sabouraud (1) for the cultivation of fungi (yeasts, moulds), particularly useful for the fungi associated with skin infections. This medium is also employed to determine microbial contamination in food, cosmetics, and clinical specimens (2).

Casitose and HM peptone provides nitrogenous, carbonaceous compounds, long chain amino acids, vitamins and other essential growth nutrients. D-Glucose provides an energy source. High glucose concentration and low pH favours fungal growth and inhibits contaminating bacteria from test samples (3).

Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet. For heavily contaminated samples, the plate must be supplemented with inhibitory agents for inhibiting bacterial growth with lower pH.

Type of specimen

Clinical samples - skin scrapings; Food samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (4,5).

For food samples, follow appropriate techniques for sample collection and processing as per guidelines (6).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic Use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets

Limitations

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
3. Some pathogenic fungi may take longer incubation time upto 5 days
4. Further biochemical and serological tests must be carried out for complete identification.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 6.5% w/v aqueous solution at 25°C. pH : 5.6±0.2

pH

5.40-5.80

Cultural Response

Cultural characteristics observed after an incubation at 25-30°C for 48- 72 hours

Organism	Inoculum (CFU)	Growth	Recovery
# *Aspergillus brasiliensis* ATCC 16404 (00053*)	50-100	luxuriant	
Candida albicans ATCC 10231 (00054*)	50-100	luxuriant	>=70%
Escherichia coli NCTC 9002	50-100	luxuriant (inhibited on media with lower pH)	>=70%
Escherichia coli ATCC 25922 (00013*)	50-100	luxuriant (inhibited on media with lower pH)	>=70%
Lactobacillus casei ATCC 334	50-100	luxuriant	>=70%
Saccharomyces cerevisiae ATCC 9763 (00058*)	50-100	luxuriant	>=70%
Trichophyton rubrum ATCC 28191	50-100	luxuriant	
Escherichia coli ATCC 8739 (00012*)	50-100	luxuriant (inhibited on media with lower pH)	>=70%
Trichophyton mentagrophytes ATCC 18748	50-100	Fair-good	

Key : (*) Corresponding WDCM numbers.
(#) - Formerly known as *Aspergillus niger*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (4,5).

Reference

1. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
2. Bacteriological Analytical Manual, 8th Edition, Revision A, 1998. AOAC, Washington D.C.
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4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

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IVD ***In vitro*** **diagnostic medical device**

10°C – 30°C **Storage temperature**

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CE Marking

Do not use if package is damaged

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